

### **REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed July 29, 2004. At the time of the Office Action, Claims 1-24 were pending in this Application. Claims 1-6, 9, and 13-24 were rejected. Claims 7, 8, and 10-12 were objected to. Claims 1-4, 6, 8, 10-16, 18, 20 and 21 have been amended to further define various features of Applicants' invention. Claims 5 and 17 have been cancelled without prejudice or disclaimer. New Claims 25-31 have been added. Applicants respectfully request reconsideration and favorable action in this case.

#### **Rejections under 35 U.S.C. §112**

Claims 1, 5, 9, 13, 17, and 21 were rejected by the Examiner under 35 U.S.C. §112, second paragraph, as being indefinite and failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants amend Claims 1, 9, 13, 21 and cancel Claims 5 and 17 to overcome these rejections and respectfully request full allowance of Claims 1, 9, 13, 17 and 21 as amended.

#### **Rejections under 35 U.S.C. §103**

Claims 1-6, and 13-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,552,681 issued to Takayuki Suzuki et al. ("Suzuki et al."). Applicants respectfully traverse and submit Suzuki et al. does not teach, disclose or suggest the invention claimed in Claims 1-6 and 13-24.

In order to establish a prima facie case of obviousness, the references cited by the Examiner must disclose all claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Furthermore, according to § 2143 of the Manual of Patent Examining Procedure, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the

reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Here, Suzuki et al. admittedly does not disclose, *i.e.*, in the words of the Examiner, "fails to teach clearly the first switch, and the second switch are separated in the semiconductor switching circuit." The Examiner concludes "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the switching system [of Suzuki] with a first switch and a second switch in order to clearly separate the control switching circuit for storing energy in the double layer capacitor or battery." Applicants respectfully submit that the Examiner's conclusion is not proper in that it is not understood where the "suggestion or motivation" to modify Suzuki et al. originated. Moreover, "[a] statement that modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill in the art at the time the claimed invention was made' because the references relied upon [here one reference] teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the references." MPEP 2143.01, p. 2100-131. (emphasis added) Applicants respectfully request withdrawal of the rejection.

The impropriety of the § 103 rejection in light of Suzuki et al. is demonstrated by the following discussion of Suzuki et al. Suzuki et al. disclose a "squirrel-cage polyphase induction machine 2" which is comparable to the starter generator ISG of the present application. In Suzuki et al., this "induction machine 2," or ISG, is electrically connected to a first side of an inverter circuit 4. The second terminal side of inverter circuit 4 is electrically connected to an intermediate circuit capacitor 7. In contrast to the embodiment of the present invention claimed, Suzuki et al.'s capacitive circuit 20 is permanently electrically connected to the second terminal side of inverter circuit 4 (see Figure 1 and associated specification description).

Semiconductor switching circuit 12 of Suzuki et al., improperly compared to the claimed first and second switches, is connected in parallel to the capacitive circuit 20. Suzuki et al.'s circuit 12 switches a resistor 11 in parallel to capacitive circuit 20 in the event of an over-current or an over-voltage. Resistor 11 absorbs excess energy if, *e.g.*, a strong braking action is taken, and a quantity of energy cannot be absorbed by capacitive circuit 20 (Figure 1, Col. 8, line 61-Col. 9, line 9). If an over-voltage is detected by detection circuit 13, circuit

12 switches the capacitive circuit 20 parallel to resistor 11 (Col. 10, lines 29-35). Thus, the current flowing through resistor 11 is monitored by current detector 15 (Col. 9, lines 5-9). Therefore, Suzuki et al.'s circuit 12 does not correspond to the claimed second switch 52, since inverter circuit 4 may not be connected to capacitive circuit 20 via circuit 12. In Suzuki et al., resistor 11 is merely switched in parallel to the capacitive circuit 20, if necessary by circuit 12.

It should also be noted, that Applicants respectfully disagree with the Examiner's statement that battery 22 may be connected via the circuit 12 to inverter circuit 4. In Suzuki et al., it is respectfully submitted that battery 22 is also switched parallel to the capacitive circuit 20 (Figure 3). The connection occurs via voltage converter 21. Consequently, in Suzuki et al., capacitive circuit 20 and battery 22 are continuously electrically connected to inverter circuit 4. Semiconductor circuit 12 can neither produce nor interrupt a connection between inverter circuit 4 and either components 20 and 22. Semiconductor 12 merely switches resistor 11 parallel to the circuit of 22 and 20. Consequently, it is respectfully submitted that Claims 1-6 and 13-24 are nonobvious in light of Suzuki et al.

#### **Allowable Subject Matter**

Applicants appreciate Examiner's consideration and indication that Claims 7-8, and 10-12 would be allowable if rewritten in independent form and Claim 9 would be allowable if written to overcome the rejection under 35 U.S.C. §112, second paragraph, as set forth in the Office Action, and to include all of the limitations of the base claim and any intervening claims.

New Claims 25-30 have been added to further distinctly claim the invention. The Examiner indicated Claim 9 would be allowable if rewritten in independent form, including all limitations of any intervening claims and the base claim. Claim 9 depended from Claim 1. New Claim 25 is submitted which includes all the limitations of Claims 9 and 1. Consequently, Applicant submits Claim 25 is in condition for allowance.

The Examiner also, for which the Applicants are thankful, indicated that Claim 10 would be allowable if rewritten in independent form including all the limitations of any intervening claims and the base claim. Claim 10 depended from Claim 1. New Claim 26 is

submitted which incorporates the limitations of Claim 10 and Claim 1. Consequently, Applicants submit new Claim 26 is in condition for allowance.

As noted, the Examiner indicated Claims 7 and 9 were allowable. Claim 13 is an independent method claim. Claims 19 and 22 depend from Claim 13 and correspond to allowable Claims 7 and 10, but are simply in method claim format. Consequently, Applicant respectfully submits, like Claims 7 and 10, Claims 19 and 22 are directed to allowable subject matter.

As noted, Claim 19 corresponds to allowable Claim 7, except in method claim format. Applicant submits new Claim 27 which corresponds to Claim 19, incorporating the limitations of Claims 19 and 13. Applicant further submits Claims 28-30 dependent on new Claim 27, which corresponds in method claim format to allowable Claim 7. Therefore, Applicants submit new Claims 27-30 are in condition for allowance and request favorable action.

#### **Information Disclosure Statement**

Applicants would like to bring to the Examiner's attention that the Examiner made no indication that Reference "6" submitted with Information Disclosure Statement and PTO Form 1449 filed on October 29, 2004 had been considered in the Office Action mailed July 29, 2004. Applicants respectfully request confirmation of the consideration of Reference "6". Applicants attach a copy of the PTO Form 1449 that was attached to the Office Action mailed July 29, 2004 and respectfully request that the Examiner place his initials next to Reference "6" if citation is to be considered or draw a line through the citation if the citation is not to be considered.

### CONCLUSION

Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of Claims 1-4, 6, 8, 10-16, 18, and 20-21 as amended.

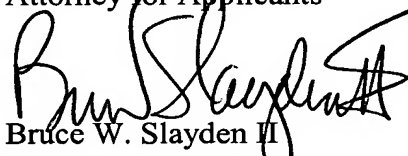
Applicants enclose a Fee Transmittal and check in the amount of \$284.00 for the two (2) additional independent claims (over 3) and six (6) additional claims added (over 24 claims previously paid for) and believe there are no other fees due at this time.

An extension of one (1) month is requested and a Notification of Extension of Time under 37 C.F.R. § 1.136 with the appropriate fee of \$110.00 is attached herewith.

Applicants believe there are no additional fees due at this time, however, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 50-2148 of Baker Botts L.L.P. in order to effectuate this filing.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2606.

Respectfully submitted,  
BAKER BOTTS L.L.P.  
Attorney for Applicants

  
Bruce W. Slayden II  
Reg. No. 33,790

SEND CORRESPONDENCE TO:

BAKER BOTTS L.L.P.

CUSTOMER ACCOUNT NO. **31625**

512.322.2606

512.322.8306 (fax)

Date: Nov. 29 '04  
Attachment(s): 1

1. Copy of PTO Form 1449 as filed with IDS on August 5, 2003 & attached to Office Action mailed July 29, 2004.
2. Fee Transmittal & check in the amount of \$248.00 for additional claims.
3. Petition for Extension of Time (one month) & check in the amount of \$110.00.

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 PATENT OFFICE

Client Reference No. 071308.0459

PATENT

Information Disclosure Citation In an Application PTO-1449	Application No.	Applicant(s): <b>STEPHAN BOLZ ET AL.</b>	
	Docket Number <b>071308.0459</b>	Group Art Unit	Filing Date <b>August 5, 2003</b>

U.S. PATENT DOCUMENTS

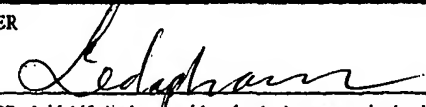
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
U	1	5,552,681	09/03/96	Suzuki et al.	318	139	05/18/95
U	2	5,998,976	12/07/99	Steffan	322	10	10/02/97

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
U	3	DE 199 03 427 A1	08-03-00	GERMANY	H02J	7/14		x
U	4	EP 0 533 037 A1	09-09-92	EPO	B60R	16/02	x	
U	5	EP 1 013 506 A2	10-01-99	EPO	B60R	16/02		x

NON-PATENT DOCUMENTS

		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
	6	"Super-Capacitors for Peak Load Shaving of Batteries"; R. Bonert, S. Reichert; University of Toronto, Canada	08-09-97

EXAMINER 	DATE CONSIDERED <b>7/24/04</b>
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.	